UVS-10000 Series UV Screen Pearlescent Ink
Technology Data Sheet

1. Product Overview

High-grade UV screen printing pearlescent ink containing precision-engineered mica-based pearlescent flakes. Delivers an elegant satin luster, shimmering light-interference effects, excellent film flexibility, and robust adhesion. Widely used on cigarette packaging, luxury liquor boxes, and fashion cosmetic packaging.

2. Product Features

- **Satin Pearlescent Luster:** Shimmering pearl gloss with silky light-and-shadow reflection;
- **Superior Adhesion & Flexibility:** Excellent bonding on gold/silver board, SBS, and laminated papers;
- **Outstanding Screen Printability:** Smooth leveling and ink passage through mesh without clogging;
- **Eco-Friendly & Low Odor:** Rapid curing with low residual VOCs.

3. Suitable Substrates

Gold/silver board, SBS ivory board, coated paper, BOPP/PET laminated stock.

4. Technical Specifications

Property	Unit	Typical Value	Test Method / Notes
Appearance & Color	-	Colored liquid	Visual inspection
Viscosity	s	Pseudoplastic state	Anti-settling suspension stability
Solid Content	%	≥90	GB/T 33374-2016
Gloss (60°)	GU	40–60	60° angle, GB/T 13217.2-2024

5. Application Guidelines

Ink Preparation	Stir slowly and thoroughly; avoid high-shear agitation to protect pearl flakes.
Plate / Cylinder Specs	250–350 mesh count.
Dilution Ratio	Use dedicated UV thinner as advised by HCOLOR.
Press Viscosity	Ready-to-use.
Press Speed	2,500–3,000 sheets/hour.
Drying Method	High-pressure mercury UV lamp system.
Equipment Cleaning	Clean with ethyl acetate or screen wash.
Application Note	Mesh count and squeegee angle dictate pearl flake orientation; verify on proofs.

6. Regulatory & Safety

Regulatory Compliance	Complies with RoHS and REACH (SVHC) directives.
Food Contact Statement	Formulated for non-direct food contact outer packaging only. For specific food-contact migration compliance, please contact HCOLOR technical department for dedicated project evaluation.
Usage Note	
Safety Data Sheet (SDS)	Available upon customer request.
User Responsibility	Users must independently verify regulatory compliance, performance, and fitness for intended purpose under actual operational conditions.

7. Packaging & Storage

Standard Packaging	20 kg / 25 kg plastic pails; 1,000 kg IBC containers (custom packaging available upon request).
Storage Conditions	Store strictly protected from light in tightly sealed containers. Keep in a dry, cool, and well-ventilated warehouse at 5–25°C, away from fire, heat sources, and strong oxidizers. Strictly avoid direct exposure to sunlight and workshop fluorescent lighting to prevent dark polymerization.
Shelf Life	12 months from production date in unopened original containers.
Post-Opening Care	Reseal immediately and tightly after dispensing; recommended to use within 6 months.

8. Typical Product Grades

Product Code	Key Features	Suitable Substrates	Target Applications
UVS-10021A	White shimmering pearl effect, high film flexibility	Paper substrates	Tobacco packaging, luxury gift boxes

1. Baseline Platforms & Customization: The products listed above are core baseline platforms proven through extensive commercial mass production. To meet specific press speeds (e.g., ultra-high-speed inline coating), substrate absorbency variations, or demanding rub/crease-crack resistance requirements, HCOLOR provides tailored viscosity adjustments, customized additive packages, and bespoke functional performance development.

2. Specialty Process Integration: If specialized finishes such as drip-off / drip-relief combination effects or tactile matte finishes are required, please contact HCOLOR technical support for a comprehensive turnkey printing formulation.

9. Disclaimer

1. The data are typical values intended for product selection and technical reference only. Unless otherwise agreed in writing, they do not constitute guaranteed specifications.

2. The information contained herein is based on our current knowledge and experience and is provided in good faith for general application guidance only. It does not constitute a legal warranty, guarantee, or binding technical specification. Users are strictly responsible for evaluating and confirming product suitability, process compatibility, and commercial usability under their actual operating conditions and production equipment prior to commercial use.